SECRET

MONTHLY REPORT

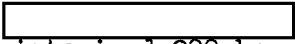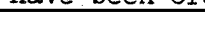25X1

PAR 222

10 July 1964

SUBJECT: Stereo Registration System

TASK/PROBLEM

1. Investigate possible means for automatically maintaining proper registration for stereo viewing on rear projection and direct viewing roll film viewers.
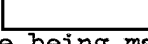
DISCUSSION

2. <u>Electrical</u>:

a. Electronic logic parts needed to yield meter output indication have been ordered and some parts have been received. [   ]   25X1
25X1 [   ] "S-PAC" logic was chosen. This is a transistorized 200 kc static logic mounted on plug-in boards.

b. The two attachments, Figures 1 and 2, show pulse wave-forms and a basic logic diagram. Signals "a" and "b" are the two photo multiplier inputs. Signal "AC" is the 60-cycle line which is used to generate the cathode ray tube sweep("HOR" and "VER") and logic sweep phasing. The phaser emits four 90-degree displaced sine waves. The scan gates, operated by the four sine waves, generate the sweep sector gates needed to determine the co-ordinates "X" and "Y"

c. Design work is now concentrated on the phaser and yoke coil drivers. At present, a one-inch diameter circle can be displayed on the C.R.T. (Cathode Ray Tube). With more suitable transformers (on order) this diameter can be enlarged.

3. <u>Optical-Mechanical</u>: A second zoom lens could not be obtained because this type is no longer made. An optical equivalent has been ordered.
25X1 Dichroic filters being made at [   ] are encountering manufacturing problems. Wood optical mounts are being made.

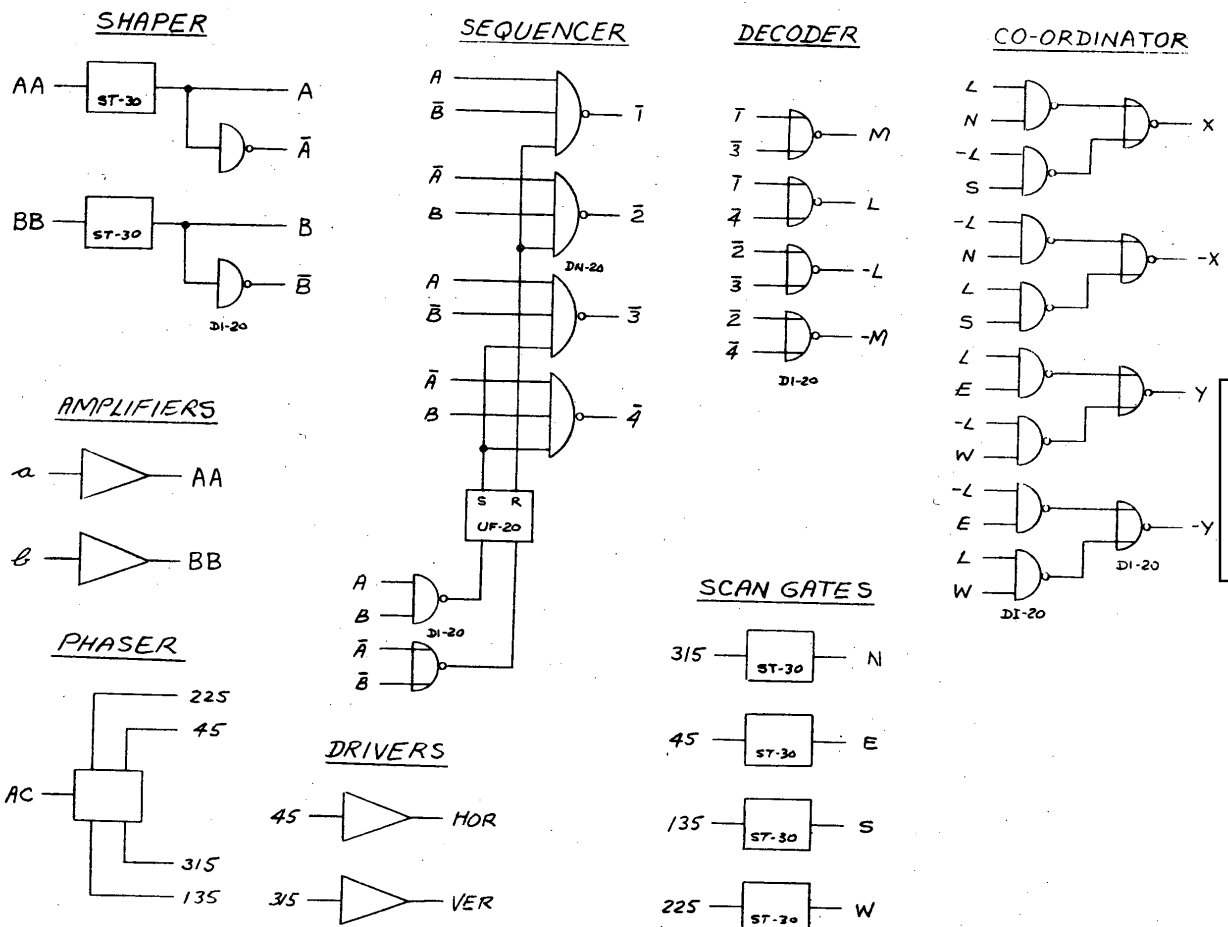PLANNED ACTIVITY

4. Planned activities for the next period are:

a. Complete C.R.T. sweep circuit design and test out logic circuits.
b. Start photo multiplier tie-in to logic.
c. Start assembly of optical breadboard.

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Declass Review by NGA.

Figure 2.

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25X1

	A/B B>A	B>A	B/A B>A	B/A	A=B	A/B	A/B A>B	A>B	B/A A>B
A									
Ā									
B									
B̄									
Ā·B̄									
A∨B									
SET									
RES									
A·B̄									
Ā·B									
1̄									
2̄									
3̄									
4̄									
M									
L									
-L									
-M									

M : A > B   SHADED
L : A / B   PULSES
-L : B / A CANCEL
-M : B > A EACH
            OTHER

Figure 1.

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